

JE (Mechanical) Test – 10-08-2021

Total 150 Multiple Choice Questions are to attend. Total time – 120 minutes

All Questions carry equal Marks. Only Tick Mark (✓) to be done against the correct answer

**PART-I**

- 1) In a centrifugal pump, the liquid enters the pump
  - a. At the top
  - b. At the bottom
  - c. At the center
  - d. From sides
- 2) For very high discharge at low pressure such as for flood control and irrigation applications, following type of pump is preferred
  - a. Centrifugal
  - b. Axial flow
  - c. Reciprocating
  - d. Mixed flow
- 3) The maximum number of jets generally employed in impulse turbine without jet interference is
  - a. 4
  - b. 6
  - c. 8
  - d. 12
- 4) Discharge of a centrifugal pump is (where  $N$  = Speed of the pump impeller)
  - a. Directly proportional to  $N$
  - b. Inversely proportional to  $N$
  - c. Directly proportional to  $N^2$
  - d. Inversely proportional to  $N^2$
- 5) For centrifugal pump impeller, the maximum value of the vane exit angle is
  - a.  $10^\circ$  to  $15^\circ$
  - b.  $15^\circ$  to  $20^\circ$
  - c.  $20^\circ$  to  $25^\circ$
  - d.  $25^\circ$  to  $30^\circ$
- 6) A hydraulic accumulator normally consists of
  - a. Two cylinders, two rams and a storage device
  - b. A cylinder and a ram
  - c. Two coaxial rams and two cylinders
  - d. A cylinder, a piston, storage tank and control valve
- 7) In a typical medium speed 4-stroke cycle diesel engine the inlet valve
  - a. Opens at  $20^\circ$  before top dead center and closes at  $35^\circ$  after the bottom dead center
  - b. Opens at top dead center and closes at bottom dead center
  - c. Opens at  $10^\circ$  after top dead center and closes  $20^\circ$  before the bottom dead center
  - d. May open or close anywhere
- 8) The operation of forcing additional air under pressure into the engine cylinder is known as
  - a. Supercharging
  - b. Carburetion
  - c. Turbulence
  - d. Delay period
- 9) Pick up the wrong statement about supercharging
  - a. Supercharging reduces knocking in diesel engines
  - b. There can be limited supercharging in petrol engines because of detonation
  - c. Supercharging at high altitudes is essential
  - d. Supercharging results in fuel economy



- 10) The theoretically correct air fuel ratio for petrol engine is of the order of
- 6: 1
  - 9: 1
  - 12: 1
  - 15: 1
- 11) In an internal combustion engine, the process of removing the burnt gases from the combustion chamber of the engine cylinder is known as
- Scavenging
  - Detonation
  - Supercharging
  - Polymerisation
- 12) In a typical medium speed, 4-stroke cycle diesel engine
- Fuel injection starts at  $10^\circ$  before top dead center and ends at  $20^\circ$  after top dead center
  - Fuel injection starts at top dead center and ends at  $20^\circ$  after top dead center
  - Fuel injection starts at just before top dead center and ends just after top dead center
  - May start and end anywhere
- 13) The rating of a diesel engine, with increase in air inlet temperature, will
- Increase linearly
  - Decrease linearly
  - Increase parabolically
  - Decrease parabolically
- 14) The probability of knocking in diesel engines is increased by
- High self ignition temperature
  - Low volatility
  - Higher viscosity
  - All of these
- 15) Pour point of fuel oil is the
- Minimum temperature to which oil is heated in order to give off inflammable vapours in sufficient quantity to ignite momentarily when brought in contact with a flame
  - Temperature at which it solidifies or congeals
  - It catches fire without external aid
  - Indicated by 90% distillation temperature i.e., when 90% of sample oil has distilled off
- 16) A stoichiometric air-fuel ratio is
- Chemically correct mixture
  - Lean mixture
  - Rich mixture for idling
  - Rich mixture for over loads
- 17) PERT stands for
- Program Estimation and Reporting Technique
  - Process Estimation and Review Technique
  - Program Evaluation and Review Technique
  - Planning Estimation and Resulting Technique
- 18) The performance of a specific task in CPM is known as
- Dummy
  - Event
  - Activity
  - Contract
- 19) Product layout is best suited where
- One type of product is produced
  - Product is standardized
  - Product is manufactured in large quantities
  - All of the above
- 20) Positive slack on a PERT indicates that project is
- Ahead of schedule
  - Beyond schedule
  - As per schedule
  - On critical path



- 21) Gantt chart provides information about the
- Material handling
  - Proper utilization of manpower
  - Production schedule
  - Efficient working of machine
- 22) CPM stands for
- Combined Process Method
  - Critical Path Method
  - Common Planning Method
  - Critical Process Method
- 23) The most suitable incentive plan for the maintenance section of an industry will be
- Piece rate system
  - Group incentive plan
  - Profit sharing plans
  - Simplification
- 24) The property of a material which enables it to resist fracture due to high impact loads is known as
- Elasticity
  - Endurance
  - Strength
  - Toughness
- 25) Rankine's theory of failure is applicable for following type of materials
- Brittle
  - Ductile
  - Elastic
  - Plastic
- 26) Resilience of a material is important, when it is subjected to
- Combined loading
  - Fatigue
  - Thermal stresses
  - Shock loading
- 27) In unilateral system of tolerance, the tolerance is allowed on
- Both sides of the actual size
  - One side of the actual size
  - One side of the nominal size
  - Both sides of the nominal size
- 28) In order to avoid tearing of the plate at an edge, the distance from the centre line of the rivet hole to the nearest edge of the plate should be equal to (where  $d$  = Diameter of rivet hole)
- $d$
  - $1.5 d$
  - $2.5 d$
  - $2 d$
- 29) The function of cutting oil when threading a pipe is to
- Provide cooling action
  - Lubricate the dies
  - Help removes chips
  - All of the above
- 30) Tapered roller bearings can take
- Axial load only
  - Both radial and axial loads and the ratio of these being greater than unity
  - Radial load only
  - Both radial and axial loads and the ratio of these being less than unity
- 31) The power transmitted by belt drive depends upon
- Belt velocity
  - Initial belt tension
  - Arc of contact
  - All of the above



- 32) The application of third type levers is found in
- A pair of tongs
  - Hand wheel of a punching press
  - Lever of a loaded safety valve
  - Handle of a hand pump
- 33) Which one of the following metals would work-harden more quickly than the others?
- Copper
  - Brass
  - Lead
  - Silver
- 34) Bell metal contains
- 70% copper and 30% zinc
  - 90% copper and 10% tin
  - 85 - 92% copper and rest tin with little lead and nickel
  - 70 - 75% copper and rest tin
- 35) When a steel containing \_\_\_\_\_ 0.8% carbon is cooled slowly below the lower critical point, it consists of ferrite and pearlite.
- Equal to
  - Less than
  - More than
  - None of these
- 36) Pipes for bicycle frames are made of
- Cold rolled steel
  - Hot rolled steel
  - Forged steel
  - Cast steel
- 37) The charge of the blast furnace consists of
- Calcined ore (8 parts), coke (4 parts) and limestone (1 part)
  - Calcined ore (4 parts), coke (1 part) and limestone (8 parts)
  - Calcined ore (1 part), coke (8 parts) and limestone (4 parts)
  - Calcined ore, coke and limestone all in equal parts
- 38) The silicon steel is widely used for
- Connecting rods
  - Cutting tools
  - Generators and transformers in the form of laminated cores
  - Motor car crankshafts
- 39) Which of the following alloys does not contain tin?
- White metal
  - Solder admiralty
  - Fusible metal
  - Phosphor bronze
- 40) Dye penetrant method is generally used to locate
- Core defects
  - Surface defects
  - Superficial defects
  - Temporary defects
- 41) White cast iron contains carbon in the form of
- Free carbon
  - Graphite
  - Cementite
  - White carbon
- 42) The brown smoke during the operation of a Bessemer converter indicates that the
- Air is burning out silicon and manganese
  - Silicon and manganese has burnt and carbon has started oxidizing
  - The converter must be tilted to remove the contents of the converter
  - The brown smoke does not occur during the operation of a Bessemer converter



- 43) The surface finish factor for a mirror polished material is
- 0.45
  - 0.65
  - 0.85
  - 1
- 44) In helical bevel gearing, the axes of shafts are \_\_\_\_\_ and the teeth are curved.
- Intersecting
  - Non-intersecting and non-parallel
  - Intersecting and non-parallel
  - None of these
- 45) The function of the washer is to
- Fill up the axial gap
  - Provide bearing area
  - Provide cushioning effect
  - Absorb shocks and vibrations
- 46) When the speed of belt increases,
- The coefficient of friction between the belt and pulley decreases
  - The coefficient of friction between the belt and pulley increases
  - The power transmitted will decrease
  - The power transmitted will increase
- 47) The cracks in helical springs used in railway carriages usually start on the inner side of the coil because of the fact that
- It is subjected to a higher cyclic loading than the outer side
  - It is subjected to a higher stress than the outer side
  - It is more stretched than the outer side during the manufacturing process
  - It has a lower curvature than the outer side
- 48) The notch angle of the Izod impact test specimen is
- $10^\circ$
  - $20^\circ$
  - $30^\circ$
  - $45^\circ$
- 49) When a shaft is subjected to a twisting moment, every cross-section of the shaft will be under
- Tensile stress
  - Compressive stress
  - Shear stress
  - Bending stress
- 50) The maximum bending moment of a simply supported beam of span  $l$  and carrying a point load  $W$  at the center of beam, is
- $Wl/4$
  - $Wl/2$
  - $Wl$
  - $Wl^2/4$
- 51) The product of the tangential force acting on the shaft and its distance from the axis of the shaft (i.e. radius of shaft) is known as
- Bending moment
  - Twisting moment
  - Torsional rigidity
  - Flexural rigidity
- 52) A material obeys hook's law up to
- Plastic limit
  - Elastic limit
  - Yield point
  - Limit of proportionality



- 53) The torque transmitted by a hollow shaft of outer diameter ( $d_1$ ) and inner diameter ( $d_2$ ) is (where,  $\tau$  = Maximum allowable shear stress)
- $\pi/4 \times \tau \times (d_1^4 - d_2^4)/d_1$
  - $\pi/16 \times \tau \times (d_1^4 - d_2^4)/d_1$
  - $\pi/32 \times \tau \times (d_1^4 - d_2^4)/d_1$
  - $\pi/64 \times \tau \times (d_1^4 - d_2^4)/d_1$
- 54) Young's modulus of a wire is defined as the stress which will increase the length of wire compared to its original length by
- Half
  - Same amount
  - Double
  - One-fourth
- 55) The intensity of stress which causes unit strain is called
- Unit mass
  - Modulus of rigidity
  - Bulk modulus
  - Modulus of Elasticity
- 56) The neutral axis of the cross-section a beam is that axis at which the bending stress is
- Zero
  - Minimum
  - Maximum
  - Infinity
- 57) The point of contraflexure is a point where
- Shear force changes sign
  - Bending moment changes sign
  - Shear force is maximum
  - Bending moment is maximum
- 58) If a material expands freely due to heating it will develop
- Thermal stresses
  - Tensile stress
  - Bending
  - No stress
- 59) The stress at which extension of the material takes place more quickly as compared to the increase in load is called
- Elastic point of the material
  - Plastic point of the material
  - Breaking point of the material
  - Yielding point of the material
- 60) The welding set up is said to have straight polarity, when
- Work is connected to the positive terminal and the electrode holder to the negative terminal
  - Work is connected to the negative terminal and the electrode holder to the positive terminal
  - Work is connected to the positive terminal and the electrode holder is earthed
  - Work is connected to the negative terminal and the electrode holder is earthed
- 61) The cold working of metals is carried out
- At the recrystallisation temperature
  - Below the recrystallisation temperature
  - Above the recrystallisation temperature
  - At any temperature
- 62) In a \_\_\_\_\_, two or more operations are performed simultaneously at the single stroke of the ram.
- Simple die
  - Progressive die
  - Combination die
  - Compound die



- 63) In a refrigeration cycle, the flow of refrigerant is controlled by
- Compressor
  - Condenser
  - Evaporator
  - Expansion valve
- 64) Absorption system normally uses the following refrigerant
- Freon-11
  - Freon-22
  - CO<sub>2</sub>
  - Ammonia
- 65) Where does the lowest temperature occur in a vapour compression cycle?
- Condenser
  - Evaporator
  - Compressor
  - Expansion valve
- 66) The COP of a vapour compression plant in comparison to vapour absorption plant is
- More
  - Less
  - Same
  - More/less depending on size of plant
- 67) One ton refrigeration corresponds to
- 50 kcal/ min
  - 50 kcal/ hr
  - 80 kcal/ min
  - 80 kcal/ hr
- 68) Plywood has the advantage of
- Greater tensile strength in longer direction
  - Greater tensile strength in shorter direction
  - Same tensile strength in all directions
  - None of the above
- 69) Which of the following is the purest form of iron?
- Cast iron
  - Wrought iron
  - Mild steel
  - High carbon steel
- 70) Cant deficiency occurs when a vehicle travels around a curve at
- Equilibrium speed
  - Speeds higher than equilibrium speed
  - Speeds lower than equilibrium speed
  - Booked speed
- 71) Due to battering action of wheels over the end of the rails, the rails get bent down and are deflected at ends. These rails are called
- Roaring rails
  - Hogged rails
  - Corrugated rails
  - Buckled rails
- 72) Angle of friction is the
- Angle between normal reaction and the resultant of normal reaction and the limiting friction
  - Ratio of limiting friction and normal reaction
  - The ratio of minimum friction force to the friction force acting when the body is just about to move
  - The ratio of minimum friction force to friction force acting when the body is in motion
- 73) Kinetic friction is the
- Tangent of angle between normal reaction and the resultant of normal reaction and the limiting friction
  - Ratio of limiting friction and normal reaction
  - The friction force acting when the body is just about to move
  - The friction force acting when the body is in motion



- 74) The air resistance to a car at 20 kmph is R. The air resistance at 40 kmph will be
- R
  - 2R
  - 4R
  - $4R^2$
- 75) The function of a first compression ring (top ring) is that it
- Increases the combustion temperature
  - Creates swirl
  - Maintains a seal and prevents the fuel leakage
  - Maintains a seal and prevents escape of burned gases and loss of pressure in the combustion chamber
- 76) The cetane number of a Diesel fuel is a measure of
- Volatility
  - Viscosity
  - Ignition quality
  - Delay period
- 77) In a petrol engine, the high voltage for spark plug is in the order of
- 1000 volts
  - 2000 volts
  - 11 kilovolts
  - 22 kilovolts
- 78) According to Dalton's law of partial pressures, (where  $p_b$  = Barometric pressure,  $p_a$  = Partial pressure of dry air, and  $p_v$  = Partial pressure of water vapour)
- $p_b = p_a - p_v$
  - $p_b = p_a + p_v$
  - $p_b = p_a \times p_v$
  - $p_b = p_a / p_v$
- 79) The heat is transferred by conduction, convection and radiation in
- Melting of ice
  - Boiler furnaces
  - Condensation of steam in condenser
  - None of these
- 80) A grey body is one whose absorptivity
- Varies with temperature
  - Varies with wavelength of the incident ray
  - Is equal to its emissivity
  - Does not vary with temperature and wavelength of the incident ray
- 81) In centrifugal pumps, maximum efficiency is obtained when the blades are
- Straight
  - Bent forward
  - Bent backward
  - Radial
- 82) The optimum value of vane exit angle for a centrifugal pump impeller is
- $10-15^\circ$
  - $20-25^\circ$
  - $30-40^\circ$
  - $50-60^\circ$
- 83) Which of the following pump is suitable for small discharge and high heads?
- Centrifugal pump
  - Axial flow pump
  - Mixed flow pump
  - Reciprocating pump
- 84) A two-terminal variable resistor is known as a
- Potentiometer
  - Thermistor
  - Rheostat
  - Wiper

P-8/16



- 85) If there is 6 A of current through the filament of a lamp, how many coulombs of charge move through the filament in 1.75 s?
- 10.5 C
  - 105 C
  - 3.4 C
  - 34 C
- 86) The unit of electrical charge is the
- Coulomb
  - Joule
  - Volt
  - Watt
- 87) When the current is 2.5 A, how many coulombs pass a point in 0.2 s?
- 12.5 C
  - 1.25 C
  - 0.5 C
  - 5 C
- 88) While testing a capacitor with ohm meter, if the capacitor shows charging, but the final resistance reading is appreciably less than normal, it can be concluded that the capacitor is
- Short-circuited
  - Open circuited
  - Alright
  - Leaky
- 89) Which of the following materials are diamagnetic?
- Silver
  - Copper
  - Silver and copper
  - Iron.
- 90) The A hydraulic accumulator normally consists of
- Two cylinders, two rams and a storage device
  - A cylinder and a ram
  - Two coaxial rams and two cylinders
  - A cylinder, a piston, storage tank and control valve

## PART-II

- 91) If a solid metal cylinder of radius 4 cm and height 10 cm is melted to make solid balls of radius 1 mm, the number of such balls produced is:
- 0.8 lakh
  - 1.0 lakh
  - 1.2 lakh
  - 1.4 lakh
- 92) A 10 m wide lawn is cultivated all along the outside of a rectangular plot measuring 100 m  $\times$  50 m. the total area of the lawn is:
- 750 m<sup>2</sup>
  - 5000 m<sup>2</sup>
  - 2800 m<sup>2</sup>
  - 2400 m<sup>2</sup>
- 93) A right cylinder and a right circular cone have the same radius and same volume. The ratio of the height of the cylinder to that of the cone is:
- 3 : 2
  - 2 : 3
  - 3 : 1
  - 1 : 3

P- 9/16



- 94) How many seconds will a 500 meter long train take to cross a man walking with a speed of 3 km/hr in the direction of the moving train if the speed of the train is 63 km/hr?
- 25
  - 30
  - 40
  - 45
- 95) Two trains 140 m and 160 m long run at the speed of 60 km/hr and 40 km/hr respectively in opposite directions on parallel tracks. The time (in seconds) which they take to cross each other, is:
- 9 sec
  - 9.6 sec
  - 10 sec
  - 10.8 sec
- 96) If the compound interest on a certain sum for 3 years at 20% per annum is Rs. 728, find the simple interest.
- Rs.900
  - Rs.200
  - Rs.300
  - Rs.600
- 97) The rates of simple interest in ICICI and HDFC bank are in the ratio 5:4. A person wants to deposit his total savings in two banks in such a way that he received equal half yearly interest from both. He should deposit the savings in ICICI and HDFC bank in the ratio:
- 2 : 5
  - 4 : 5
  - 5 : 2
  - 5 : 4
- 98) The cost of a machine is estimated to be decreasing at the rate of 15% every year. If it costs Rs. 6,000 now, what will be the estimated value of the machine after 2 years?
- Rs. 3,750
  - Rs. 4,335
  - Rs. 3,225
  - Rs. 5,000
- 99) The largest number which divides 70 and 125, leaving remainders 5 and 8 respectively, is
- 13
  - 65
  - 875
  - 1750
- 100) The least number that is divisible by all the numbers from 1 to 10 (both inclusive) is
- 10
  - 100
  - 504
  - 2520
- 101) The decimal expansion of the rational number will terminate after
- one decimal place
  - two decimal places
  - three decimal places
  - four decimal places
- 102) Positive value of  $p$  for which equation  $x^2 + px + 64 = 0$  and  $x^2 - 8x + p = 0$  will both have real roots will be
- $p \geq 16$
  - $p \leq 16$
  - $p = 16$
  - none of these
- 103) If  $n$ th terms of the APs 63, 65, 67, ... and 3, 10, 17, ... are equal, then  $n$  is
- 27
  - 23
  - 15
  - 13
- 104) Sum of all natural numbers lying between 250 and 1000 which are exactly divisible by 3 is
- 157365
  - 153657
  - 156375
  - 155637
- 105) Mode is the
- middle most frequent value
  - least frequent value
  - maximum frequent value
  - none of these
- 106) The algebraic sum of the deviations of a frequency distribution from its mean is always,
- greater than zero
  - less than zero
  - zero
  - a non-zero number

P-10/16



- 107) What is the average of first 150 natural numbers?  
(a) 70  
(b) 70.5  
(c) 75  
(d) 75.5
- 108) What is the rate of discount if a car which price was \$4,000 was sold for \$3,200 ?  
(a) 14%  
(b) 16%  
(c) 18%  
(d) 20%
- 109)  $|-4| + |4| - 4 + 4 = ?$   
(a) 0  
(b) 2  
(c) 4  
(d) 8
- 110) The 11<sup>th</sup> term of  $-5, -5/2, 0, 5/2$  ----- is  
a. -20  
b. 20  
c. -30  
d. 30

To Continue for Remaining Questions As Part-III & IV On Next Sheets

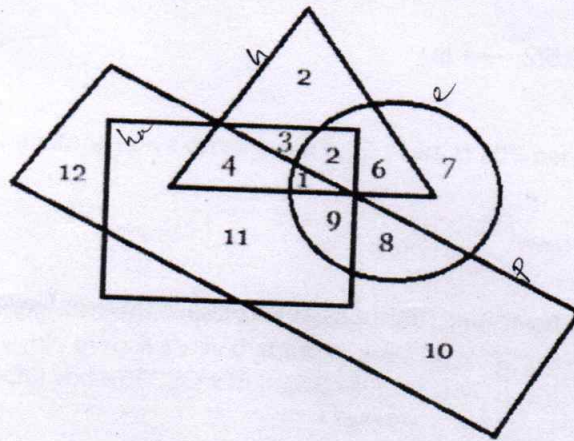
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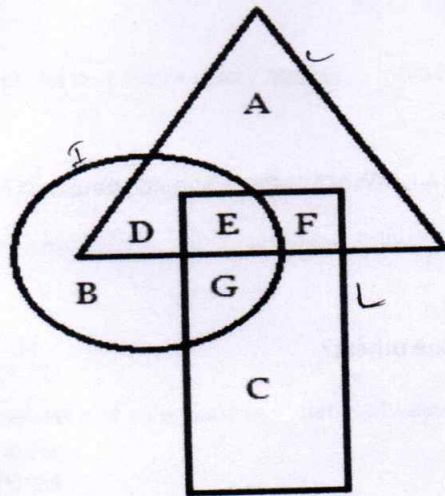
**PART-III**

1. These questions are based on the given diagram in which the triangle stands for honest persons, circle stands for educated persons, square stands for hardworking persons and rectangle stands for poor persons. Different regions in the diagram are numbered from 1 to 12 which shows the number of different types of persons. Study the diagram carefully to answer the following questions:

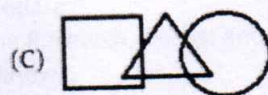
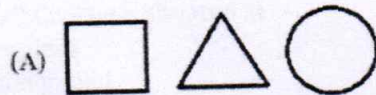


2. Number of people who are neither educated nor poor but honest, are;  
(A) 3  
(B) 4  
(C) 5  
(D) 8
3. Number of people who are neither hardworking nor educated but honest, are;  
(A) 2  
(B) 5  
(C) 6  
(D) 7
4. Numbers of people who are poor, hardworking and educated are;  
(A) 7  
(B) 8  
(C) 9  
(D) 11
5. Numbers of people hardworking and not poor  
(A) 5  
(B) 7  
(C) 12  
(D) None of the above
6. In the following figure, the circle denotes intelligent persons; the triangle is for creative persons, while the rectangle consists of lazy persons. Refer to this figure to answer these questions:





7. Who are creative but lazy persons?  
 (A) A  
 (B) E and F  
 (C) F  
 (D) C
8. Who are intelligent as well as creative persons?  
 (A) B  
 (B) F  
 (C) A  
 (D) D
9. Who are intelligent and lazy but creative persons?  
 (A) E  
 (B) A, D and E  
 (C) E, F and G  
 (D) None of these
10. Choose the diagrams which represent the boy, girl and a dog.



11. Look at this series: 12, 11, 13, 12, 14, 13, ... What number should come next?

A. 10  
 B. 16  
 C. 13  
 D. 15

12. Look at this series: 7, 10, 8, 11, 9, 12, ... What number should come next?

A. 7  
 B. 12  
 C. 10  
 D. 13



13. Look at this series: 2, 1,  $(1/2)$ ,  $(1/4)$ , .... What number should come next?
- A.  $(1/3)$
  - B.  $(1/8)$
  - C.  $(2/8)$
  - D.  $(1/16)$
14. Which word does NOT belong with the others?
- A. index
  - B. glossary
  - C. chapter
  - D. book
15. Which word is the odd man out?
- A. trivial
  - B. unimportant
  - C. important
  - D. insignificant
16. Which word does NOT belong with the others?
- A. wing
  - B. fin
  - C. beak
  - D. rudder
17. CUP : LIP :: BIRD : ?
- A. GRASS
  - B. FOREST
  - C. BEAK
  - D. BUSH
18. Safe : Secure :: Protect :
- A. Lock
  - B. Guard
  - C. Sure
  - D. Conserve
19. Melt : Liquid :: Freeze :
- A. Ice
  - B. Solid
  - C. Condense
  - D. Push
20. Kevin, Joseph, and Nicholas are 3 brothers. If the following statements are all true, which of them is the youngest?
- ✓Kevin is the oldest.
  - ✓Nicholas is not the oldest.
  - ✓Joseph is not the youngest.
- A. Joseph
  - B. Kevin
  - C. Nicholas
  - D. Both Joseph



**PART –IV**

1. Presentation of the first ever railway budget in India held in
  - (A) 1853
  - (B) 1888
  - (C) 1925
  - (D) 1905
2. Which is the shortest station name in Indian Railways?
  - (A) Pune
  - (B) Bc
  - (C) Goa
  - (D) Ib
3. Where is the wheel and axle plant of Indian Railways situated?
  - (A) Chittranjan
  - (B) Kapurthala
  - (C) Bangalore
  - (D) Perambur
4. Which train in India has the longest route length?
  - (A) Vivek Express
  - (B) Indrani Express
  - (C) Kanyakumari Express
  - (D) Bangalore Guwahati Express
5. A station where the rail lines end, is called
  - (A) Junction station
  - (B) Way-side station
  - (C) Block station
  - (D) Terminal station
6. How much distance was travelled by first train of India?
  - (A) 33 km
  - (B) 36 km
  - (C) 34 km
  - (D) 46 km
7. Railway Staff College is situated at
  - (A) Bangalore
  - (B) Secundrabad
  - (C) Chennai
  - (D) Vadodara
8. Where is the Research, Design and Standard Organization situated?
  - (A) Lucknow
  - (B) Bangalore
  - (C) Pune
  - (D) New Delhi
9. In which Governor-General's reign railway lines in India were established?
  - (A) Lord William Bentick
  - (B) Lord Cornwallis
  - (C) Lord Kenning
  - (D) Lord Dalhousie
10. Fire temple is the place of worship of which of the following religion?
  - (A) Taoism
  - (B) Judaism
  - (C) Zoroastrianism (Parsi Religion)
  - (D) Shintoism



11. East Timor, which became the 191st member of the UN, is in the continent of
  - (A) Asia
  - (B) Africa
  - (C) Europe
  - (D) South America
12. David Copperfield is the name of
  - (A) Novel
  - (B) Famous actor
  - (C) Poem
  - (D) Writer
13. Which among the following was the great center of trade and commerce in India in the Guptas period?
  - (A) Taxila
  - (B) Tamralipti
  - (C) Mathura
  - (D) Vatapi
14. When did Ashoka became emperor of India?
  - (A) 336 BC
  - (B) 375 BC
  - (C) 279 BC
  - (D) 264 BC
15. In which of the following States are the Ajanta Caves situated?
  - (A) Madhya Pradesh
  - (B) Maharashtra
  - (C) Orissa
  - (D) Karnataka
16. Who is called the father of White Revolution?
  - (A) Dr. kurien Verghese
  - (B) Nanjunda Swami
  - (C) M. S. Swaminathan
  - (D) U. R. Rao
17. Who can dissolve the Lok Sabha before the expiry of its normal term of 5 years?
  - (A) The Prime Minister
  - (B) The President at his own
  - (C) The President on the recommendation of the Prime Minister
  - (D) The President on the recommendation of the Speaker
18. The national flag was adopted by the Constituent Assembly of India on
  - (A) August 15, 1947
  - (B) July 22, 1947
  - (C) January 26, 1950
  - (D) January 2, 1950
19. Which of the following commissions has not been included in the Constitution of India?
  - (A) The Planning Commission
  - (B) UPSC
  - (C) The Election Commission
  - (D) The Finance Commission
20. Which of following two words were added to the Preamble of the Indian Constitution by the 42nd Amendment?
  - (A) Sovereign and democratic
  - (B) Secular and Socialist
  - (C) Secular and Democratic
  - (D) Democratic and Republic